

Indiana



U.S. businesses and industries are in dire need of engineers. In fact, current labor statistics report that American companies are short approximately one million engineers. Many companies are searching overseas to fill the vacancies because there are not enough U.S. students electing to study engineering and related fields. To help fill this gap, a cooperative partnership among the Department of Workforce Development, the Department of Education and Purdue University, and the Commission for Higher Education introduced a hands-on pre-engineering program call Project Lead the Way (PLTW).

PLTW is designed to encourage students to pursue careers in engineering and technology areas. Courses include Introduction to Engineering Design, Digital Electronics, Principals of Engineering, Computer Integrated Manufacturing, and Engineering Design and Development. The curriculum is based on higher-level math and science concepts that are taught in a project-based approach that students enjoy. PLTW teachers must pass a rigorous math test and a two-week training session at Purdue University or another PLTW training center.

"This is a partnership that's beneficial for everyone involved," says James Little, PLTW Director at Kokomo-Center Township Community Schools. "Local industry builds student interest in the engineering field and ultimately increases the

number of highly skilled workers. Post-secondary schools benefit from increased enrollment in their engineering programs.”

**Indiana Project Lead the Way Sites
Funded by
Indiana Department of Workforce Development**

Reg.	School	City	Dollars
1A	Hobart High School	Hobart	\$75,000
1A	Hobart Middle School	Hobart	\$27,500
1A	Lowell High School	Lowell	\$74,200
1A	Lowell Middle School	Lowell	\$27,500
1B	Portage High School	Portage	\$80,000
1B	Fegely Middle School	Portage	\$27,500
1B	Valparaiso High School	Valparaiso	\$55,000
1B	Ben Franklin MS	Valparaiso	\$27,500
1B	Wheeler High School	Valparaiso	\$80,000
1B	Union Township Middle School	Valparaiso	\$32,500
1B	Rensselaer Central High School	Rensselaer	\$80,000
1B	Rensselaer Central Middle School	Rensselaer	\$27,500
2	Penn High School	Mishawaka	\$24,850
2	Warsaw Area Career Center*	Warsaw	\$20,000
3	Leo Senior High School	Leo	\$80,000
3	Leo Junior High School	Leo	\$27,500
3	Homestead High School	Fort Wayne	\$36,500
3	Summit Middle School	Fort Wayne	\$20,250
3	Woodside Middle School	Fort Wayne	\$20,250
4	Kankakee Valley High School	Wheatfield	\$35,000
4	South Newton High School	Kentland	\$75,000
4	South Newton Middle School	Kentland	\$27,500
4	Jefferson High School*	Lafayette	\$20,000
4	Twin Lakes High School	Monticello	\$35,000
5	Kokomo High School	Kokomo	\$80,000

5	Bon Air Middle School	Kokomo	\$3,750
5	Central Middle School	Kokomo	\$3,750
5	Lafayette Park Middle School	Kokomo	\$3,750
5	Maple Crest Middle School	Kokomo	\$3,750
5	Eastern Howard	Kokomo	\$15,000
5	Logansport High School	Logansport	\$21,500
8	McKenzie Career Center	Indianapolis	\$75,000
8	Brownsburg High School	Indianapolis	\$20,000
8	Greenfield Central*	Greenfield	\$20,000
8	Perry Meridian High School*	Indianapolis	\$20,000
8	Southport High School*	Indianapolis	\$20,000
8	Craig Middle School	Indianapolis	\$27,500
8	Fall Creek Valley Middle School	Indianapolis	\$16,500
8	Belzer Middle School	Indianapolis	\$16,500
8	Pike High School	Indianapolis	\$15,000
8	Walker Career Center	Indianapolis	\$16,500
12	Jennings County High School	North Vernon	\$55,000
12	Jennings County Middle School	North Vernon	\$27,500
13	Harwood Middle School	Evansville	\$15,000
13	Helfrich Middle School	Evansville	\$15,000
13	Wood Memorial High School*	Oakland City	\$11,954
13	Heritage Hills High School*	Lincoln City	\$11,954
13	Pike Central High School*	Petersburg	\$11,954
13	Jasper High School*	Jasper	\$11,954
13	Southridge High School*	Huntingburg	\$11,954
13	North Posey Junior High**	Poseyville	\$20,000
13	North Posey Senior High **	Poseyville	\$20,000
13	Forest Park Jr. Sr. High School*	Ferdinand	\$11,954
13	Northeast Dubois High School*	Dubois	\$11,954
13	Ivy Tech Community College- Evansille	Evansville	\$35,000
	Total # of school sites	55	\$ 1,685,728

*Schools to begin PLTW curriculum in the 2003/2004 school year

** School funded through Ivy Tech to begin in the 2003/2004 school year



At Woodside Middle School, in Fort Wayne, the entire 6th grade class has a Rube Goldberg simple machines competition. The student works with engineers from General Motors to complete their simple machines. All five classes invite the engineer mentors to a final competition in the gym.



Across the street at Homestead High School, students have used the PLTW software to create an award winning super high mileage car.





Photo 3 & 4 –All teachers must attend an intensive 2-week training course at Purdue University – Kokomo or another university affiliate for each of the PLTW courses they teach. Each course is team taught by a University Professor and a master teacher.